

To: 'Brown, Anthony R (RM)'[anthony.brown@bp.com]
Cc: Black, Ned[Black.Ned@epa.gov]; Cory Koger[Cory.S.Koger@usace.army.mil]; Darrel Cruz 1[dcruz@washoetanf.org]; Darrel Cruz 2[Darrel.Cruz@washoetribe.us]; David Friedman[dfriedman@ndep.nv.gov]; Diane Vitols[Diane.Vitols@washoetribe.us]; Doug Carey[douglas.carey@waterboards.ca.gov]; Fred K[fredk@aeseinc.com]; Riley, Gary[riley.gary@epa.gov]; Greg Reller[gr@burlesonconsulting.com]; Wirtschafter, Joshua[Wirtschafter.Joshua@epa.gov]; Ken Maas[kmaas@fs.fed.us]; Lombardi, Marc (marc.lombardi@amecfw.com)[marc.lombardi@amecfw.com]; Patty Cubanski[pc@burlesonconsulting.com]; Sanchez, Yolanda[Sanchez.Yolanda@epa.gov]; Serda, Sophia[Serda.Sophia@epa.gov]; Shaffer, Caleb[Shaffer.Caleb@epa.gov]; Steve Hampton[Steve.Hampton@wildlife.ca.gov]; Thomas Maurer[thomas_maurer@fws.gov]; Toby McBride[toby_mcbride@fws.gov]
From: Deschambault, Lynda
Sent: Wed 12/28/2016 3:20:58 AM
Subject: EPA summary of Action items on Sediment and Floodplain soils December 13 Presentation Meeting

Dear Mr. Brown,

Thank you for another productive meeting!

Could you please provide us with the most up to date version of your powerpoint presentation from the December 13th meeting?

During the presentation of Stream Sediment/Floodplain Soil Investigations. ARC offered EPA the following reporting options:

1. Independently prepared Stream Sediment TDSR (Q1 2017) and Floodplain Soil TDSR (late Q2 2017)
2. Combined Stream Sediment and Floodplain Soil TDSR (late Q2 2017)

EPA noted that neither of these options include reports with data from Floodplain Soil collected during the 2016 field season.

Nor do these options reflect EPA past comments requesting expedited turnaround on reports.

In our most recent letter, (December 22 2016) EPA clarified and directed that these submittals should be considered Draft RI/FS sections that includes both validated analytical data as well as data interpretation and risk assessment summaries. EPA directs ARC to ensure the interim TDSR submittals are sufficiently scheduled to ensure delivery of a first inclusive draft RI/FS by December 31, 2017 and a complete and final RI/FS by August 30, 2018. To achieve that goal, EPA still holds that up to 6 months or 180 days is reasonable and follows EPA guidance and common practices at other Superfund sites. EPA is not opposed to extending that delivery time to 8 months (240 days).

Please provide the stream sediment and Floodplain Soil TDSR's for both 2015 and 2016 data to allow for this schedule. Six to eight months from the date of last 2016 sampling (October 2106) would entail ARC provide the 2016 sediment and floodplain data (combined report) to EPA by June 2017. Please see our draft agenda (below) indicating some of the basic specific data presentation options that should be included.

Other action items from our meeting:

- ARC to confirm that an annotated RI/FS outline was provided to EPA after December 2015. ARC confirmed that no revised TOC was submitted.
- EPA to provide comments on the annotated RI/FS outline (**completed** on December 22, 2016)
 - EPA to provide comments on schedule submittals (**completed** on December 22, 2016)
 - EPA to provide comments on the Reporting options. (**completed** on December 22, 2016)
- EPA to provide technical review comments on the Mine Waste TDSR. **In progress.**
- ARC to prepare a revised schedule for delivery of this and other TDSRs within 6 to 8 months; and
- a draft RIFS (including the risk assessments) by December 31, 2017

EPA looks forward to our January 17, 2016 face-to-face meeting in San Francisco to discuss and reach agreement on a final RI/FS schedule.

Best Regards,

Lynda Deschambault

Environmental Scientist

USEPA Region 09

(415) 947-4183

Please be advised I may have limited access to email , therefore please be patient with any communication delays.

From: Brown, Anthony R (RM) [<mailto:anthony.brown@bp.com>]

Sent: Wednesday, November 23, 2016 10:01 AM

To: Deschambault, Lynda <Deschambault.Lynda@epa.gov>; Lombardi, Marc (AMEC Geomatrix) <marc.lombardi@amec.com>

Subject: RE: Presentation Materials for December 13 Technical Meeting

Hi Lynda, thanks for the note.

Marc, request AMECFW please address the items below in preparation for the subject meeting.
Thanks... Tony...

From: Deschambault, Lynda [<mailto:Deschambault.Lynda@epa.gov>]

Sent: Tuesday, November 22, 2016 4:18 PM

To: Brown, Anthony R (RM)

Cc: Riley, Gary; Greg Reller; Cory Koger; Black, Ned; Shaffer, Caleb; Lombardi, Marc

(marc.lombardi@amecfw.com); Doug Carey; chris.stetler@waterboards.ca.gov; Hillenbrand, John; Chang-Minami, Kay SPK; Patty Cubanski

Subject: Presentation Materials for December 13 Technical Meeting

Dear Mr. Brown.

We look forward to our December 13th technical meeting at the AMEC office!

10940 White Rock Road, Suite 190,

Rancho Cordova, CA 95670

Our meetings are always productive and informative. Please provide/share the webinar login information.

Also as promised, we have put together a list of basic graphics that ARC should provide in a Powerpoint to EPA in advance of the meeting. During past technical meetings, presentation graphics are often inconsistent or poorly presented. EPA provides this higher level of detail and looks forward to a productive meeting with graphics that will assist in understanding the stream sediment and floodplain soil ; and provide for robust conversation.

- 1) Overview maps that show sample locations (one or two maps to scale)
- 2) Stream profiles of metal concentration versus distance downstream from a selected point (for example: Station 1, Station 15, CUD) The X axis should be in linear length units and should be the same for all comparable graphs. The Y axis should be the same for comparable graphs, and could be either linear or log (please pick ONE of these and use consistently throughout the graphics for each comparable set of images) depending on the concentration range.
 - a. Comparable graphs/images are those showing the same reach of the stream system, and/or same chemical.
 - b. Start with the whole system (ie Leviathan Creek to the bottom of Bryant Creek)
 - c. Each stream profile should include the stream sediment, category 1, category 2, and category 3 floodplain soil data; each as a separate profile line with different colors AND symbols that are easily distinguishable at the presentation scale and format.
 - d. Symbols must be consistent (ie do NOT use a blue square for stream sediment on

one figure and category 2 floodplain soil on another figure...)

e. After showing the entire stream profile (ie from the chosen starting point in Leviathan Creek to the bottom of Bryant Creek), please provide enlarged profiles of any areas of interest.

3) Transects of metal concentrations for stream sediment AND category 1, category 2, and category 3 floodplain soil data. Select the transects based on areas of interest (i.e. from the stream profiles). These should follow the same rules as the stream profiles (ie consistent scales, symbols, etc.) please Provide index maps showing transect locations.

a. Each transect should include a diagram of the location of the differing floodplain soil and stream sediments with respect to one another.

4) If there are widely used sediment screening benchmarks (note that these should also apply to what ARC calls 'floodplain soil') these should be shown on the profiles for comparison and to assist in visually showing the significance of the analytical results.

5) At a minimum please provide profiles for arsenic, copper, nickel, and thallium.

Best Regards,

Lynda Deschambault

Environmental Scientist

USEPA Region 09

(415) 947-4183

Please be advised I may have limited access to email , therefore please be patient with any communication delays.

From: Deschambault, Lynda
Sent: Friday, October 28, 2016 8:15 AM
To: Brown, Anthony R (RM) <anthony.brown@bp.com>
Cc: Gary Riley <Riley.Gary@epa.gov>; Greg Reller <gr@burlesonconsulting.com>; Cory Koger <Cory.S.Koger@usace.army.mil>; Patty Cubanski <pc@burlesonconsulting.com>; 'Chang-Minami, Kay SPK' <Kay.Chang-Minami@usace.army.mil>; Serda, Sophia <Serda.Sophia@epa.gov>; Black, Ned <Black.Ned@epa.gov>; Wirschafter, Joshua <Wirschafter.Joshua@epa.gov>; Hillenbrand, John <Hillenbrand.John@epa.gov>; Doug Carey <douglas.carey@waterboards.ca.gov>; 'Chris.Stetler@waterboards.ca.gov' <Chris.Stetler@waterboards.ca.gov>; 'Lombardi, Marc' <Marc.Lombardi@amecfw.com>
Subject: December 13 Technical Meeting

Dear Mr. Brown,

EPA looks forward to our next technical meeting. Here is a proposed agenda and logistics. EPA anticipates that ARC will provide a Technical Data Summary Report (TDSR) on Sediment and Floodplain soils in advance of the meeting. Preferably 72 hours in advance.

- **DURATION:** Let's plan for the full day: 10 am to 4pm. Confirm location is it Waterboard or AMEC office?
- **WEBINAR:** Please set up a webinar for those who can't attend the whole meeting
- **AGENDA:** Here is a draft. EPA looks forward to a review and discussion of the following items:

DRAFT AGENDA

Introductions

Safety Moment

Stream Sediment

Available data (QCSR and DQA)

Stream Profiles

Screening benchmark comparisons (risk assessment calculations)

Reference Comparison

Elevated risks attributable to the site;

Implications for the FS

Floodplain Soil

Available data (QCSR and DQA)

Stream Profiles

Screening benchmark comparisons (risk assessment calculations)

Reference Comparison

Elevated risks attributable to the site;

Implications for the FS

Field work remaining in 2017; this and other media

Wrap up/ Next steps

EPA would like to note that at Leviathan, Stream Sediment is defined as the active sediment in the upper two centimeters of the stream channel. Deeper or more stationary sediment is classified as floodplain soil. The discussion at our meeting, and the data in the TDSR should include both stream sediment and floodplain soil as they are defined at Leviathan.

